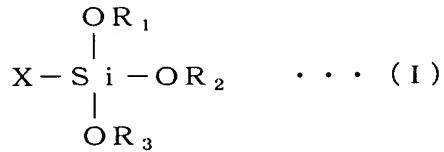


PATENT CLAIMS

1. A water-based heat-radiation-preventive coating material for glasses wherein 0.001 to 10% by weight of a silane coupling agent represented by the following general formula (I) is added to deionized water having a total anion content of 700 mgCaCO₃/L or lower.



(In the formula, X is a group reactive or compatible with organic materials. R₁, R₂, and R₃ are, each independently, OH or a group capable of generating a silanol upon hydrolysis and they may be same or different each other.)

2. The water-based heat-radiation-preventive coating material for glasses according to Claim 1, characterized in that X in said general formula (I) is an amino group.

3. The water-based heat-radiation-preventive coating material for glasses according to Claims 1 or 2, wherein 0.005 to 3.5% by weight of a cationic surfactant or a nonionic surfactant is comprised in.

4. A heat-radiation-preventive glass characterized in that a heat-radiation-preventive coating film formed from a coating layer of said water-based heat-radiation-preventive coating material for glasses according to any of Claims 1 to 3 is applied onto one side of a glass substrate.

5. The heat-radiation-preventive glass according to Claim 4, characterized in that visible light transparency of said heat-radiation-preventive coating film is larger than visible light transparency of said glass substrate and solar-radiation heat absorptivity and radiation heat absorptivity within the wavelength band of heat radiation at ordinary temperature of said heat-radiation-preventive coating film are smaller than solar-radiation heat absorptivity and radiation heat absorptivity within the wavelength band of heat radiation at ordinary temperature of said glass substrate.

6. The heat-radiation-preventive glass according to Claims 4 or 5, characterized in that said heat-radiation-preventive coating film has visible light transparency of 90% or more, solar-radiation heat absorptivity of 0.01 to 11% and radiation heat absorptivity within the wavelength band of heat radiation at ordinary temperature of 0.01 to 20%.

7. The heat-radiation-preventive glass according to Claims 4 to 6, characterized in that the thickness of said heat-radiation-preventive coating film is 0.01 to 10 μ m.

8. A method of producing a heat-radiation-preventive glass which comprises a coating step wherein a coating layer is formed by coating said water-based heat-radiation-preventive coating material for glasses according to any of Claims 1 to 3 onto one side of a glass substrate and a desiccating step wherein a heat-radiation-preventive

coating film is formed by desiccating said coating layer.

9. The method of producing a heat-radiation-preventive glass according to Claim 7, characterized in that said heat-radiation-preventive coating film has visible light transparency of 90% or more, solar-radiation heat absorptivity of 0.01 to 11% and radiation heat absorptivity within the wavelength band of heat radiation at ordinary temperature of 0.01 to 20%.

10. A method of preventing heat radiation from a glass which has absorbed solar-radiation heat, wherein a heat-radiation-preventive glass according to any of Claims 4 to 6 is disposed so that the glass substrate side faces the direction from which solar-radiation heat is irradiated whereby heat radiation from said heat-radiation-preventive coating film side is prevented.